

# Tellabs® 8600 Managed Edge System 2-Port 1000BASE-X Gigabit Ethernet Interface Module

Optical Interface Module enables cost-efficient interfacing for synchronous gigabit Ethernet connectivity

## Overview

The Tellabs® 8600 Managed Edge System consists of a range of modular IP/MPLS-based network elements and an integrated network and service management system.

The 2-port 1000BASE-X Ethernet Interface Module (IFM) is used with Tellabs® 8600 system elements, including the Tellabs 8660® Edge Switch, Tellabs 8630® Access Switch and Tellabs 8620® Access Switch. The module is mounted on the Interface Module Concentrator (IFC) of the Tellabs 8660/8630 switches or in the Tellabs 8620 switch's chassis.

The module provides cost-effective synchronous Gigabit Ethernet connectivity.

## Applications

Gigabit Ethernet interfaces are widely used in today's networks. The 2-Port 1000BASE-X Ethernet IFM provides wire-speed Gigabit Ethernet connectivity in both access and link interfaces.

The 2-Port 1000BASE-X Ethernet IFM can be used in a mobile transport network to connect hub sites and RNC/BSC sites to the access network. The GE interface can also be used in a 3G packet core network.

In wireline applications, the 2-Port 1000BASE-X Ethernet IFM can be used as the core interface or as an attachment interface to connect customers to VPN services.

## Product description

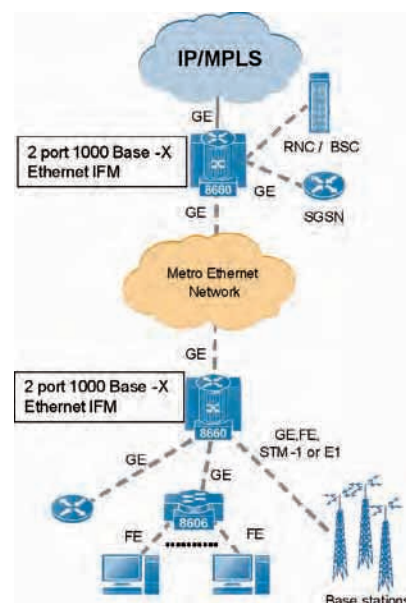
The 2-Port 1000BASE-X Ethernet IFM provides the Tellabs 8600 system with a wire-speed GE interface, which supports both electrical and optical physical media with Small Form Factor Pluggable (SFP) transceivers.

The module is mounted to the IFC or to the Tellabs® 8620 Access Switch. An IFC can be equipped with any two modules and then placed in any free slot in the Tellabs® 8660 Edge Switch or Tellabs® 8630 Access Switch.

The Tellabs system 2-Port 1000BASE-X Ethernet IFM provides wire-speed throughput. The module supports IP/MPLS DiffServ-based traffic management and per-VLAN shaping.



2-Port 1000BASE-X Gigabit Ethernet IFM



## Network management

As part of the Tellabs 8600 system, the 2-Port 1000BASE-X Ethernet IFM is fully managed with the Tellabs® 8000 Network Manager. All interface and service/connection-level configuration can be done remotely through the Tellabs 8000 manager's GUI-based tools. This is the primary and easiest way to configure the unit and the network.

The Tellabs 8000 manager also provides centralized fault and performance monitoring, as well as in-built testing capabilities. Alternatively, CLI can be used for setting up the parameters for the module. SNMP is supported for monitoring purposes (e.g., for fault and performance management for other systems). The Tellabs 8000 manager takes care of maintaining full consistency between the network elements and the database.

## Specifications

### Physical Interface

- Replaceable SFP modules with multiple reaches and types including electrical interface

### Encapsulations

- IPv4/VLAN/Ethernet (RFC 894)
- IPv4/LLC\_SNAP/VLAN/Ethernet (RFC 1042)
- IPv6/VLAN/Ethernet (RFC 2464)\*
- IPv6/LLC\_SNAP/VLAN/Ethernet (RFC 1042)\*
- MPLS/VLAN/Ethernet (RFC 3032)

### Functionality

- IEEE 802.3-compliant MAC functionality with PAUSE frame support
- 802.1Q VLAN support (4096 VLAN IDs per module)
- IP VPN (RFC 2547bis)
- RFC 4448 Encapsulation Methods for Transport of Ethernet over MPLS Networks
- Port-based and VLAN-based Pseudo Wires
- Maximum frame size of 12000 bytes

### Quality of Service

- Strict Priority and Weighted Fair Queuing (WFQ) scheduling
- DiffServ traffic policing with two-rate three-color marker (RFC 2698)
- RED and WRED queue management
- Traffic shaping per VLAN
- DiffServ Aware MPLS traffic engineering (E-LSP and L-LSP)
- Traffic classification based on ingress port, 802.1Q (VLAN), 802.1P (PRI) MPLS EXP, L-LSP, DSCP or L3/L4 header fields
- RSVP-TE CAC with overbooking option

### Power Consumption

- Typical: 4.3 W
- Maximum: 5.5 W

### Environment

- Storage: ETS 300 019-1-1:2003-04 Class 1.1, temperature:  $-5^{\circ}\text{C}$  to  $45^{\circ}\text{C}$
- Transportation: ETS 300 019 1 2:2003-04 Class 2.3, temperature:  $-40^{\circ}\text{C}$  to  $70^{\circ}\text{C}$
- Normal operating conditions: ETS 300 019-1-3:2003-04 Class 3.2 (non condensing), temperature:  $-5^{\circ}\text{C}$  to  $45^{\circ}\text{C}$ , relative humidity: 5% to 95%

### Regulations/standards

- Safety: EN 60950-1:2001
- EMC: EN 300 386:2000 and EN 300 386:2001
- Telecoms: RTTE Directive 1999/5/EC
- NEBS Level 3

## Ordering and availability

This is a general-availability product. For more information, please contact your local Tellabs sales representative or local Tellabs sales office, or visit <http://www.tellabs.com/>

\*) For future release

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